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APPLICANT: KOKUSAI ELECTRIC CO LTD;

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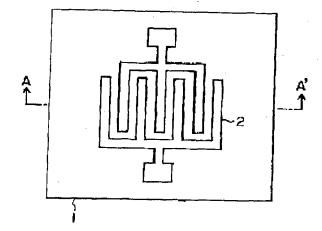
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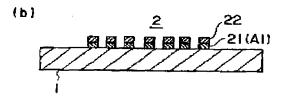
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TITLE

: LOVE WAVE-TYPE SURFACE **ACOUSTIC WAVE DEVICE**





ABSTRACT: PROBLEM TO BE SOLVED: To reduce cost by providing a Love wave-type surface acoustic wave by using a comparatively inexpensive base metal with large specific gravity, such as Ta(tantalum), W(tungsten) and Pd(palladium), instead of noble metal such as gold.

> SOLUTION: An Interdigital electrode(IDT electrode) 21 of a first layer made of Al(aluminum) is formed on a rotary Y cut-X transmission LiN_bO₃ piezoelectric substrate 1. Then, an IDT electrode 22 of a second layer formed of Ta, W or Pd is formed on the electrode with a prescribed film thickness. The IDT electrode 21 of the first layer of AI is formed on -10° to +50° rotary Y cut LiTaO3 piezoelectric substrate 1, and the IDT electrode 22 of the second layer of Ta, W or PD is formed on the electrode with a prescribed thickness. The both IDT electrodes are made into two layers. The layer below aluminum is a layer, where electric resistance is lowered and the upper layer formed of Ta, W or Pd is the layer formed making the Love-wave and it can control the film thickness more easily as compared to gold.

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